

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAR 3 1 2017

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Robert Chalhoub Heritage-Crystal Clean, LLC 3970 West 10th Street Indianapolis, Indiana 46222

Re:

Notice of Violation and Finding of Violation

Heritage-Crystal Clean, LLC

Indianapolis, Indiana

Dear Mr. Chalhoub:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Heritage-Crystal Clean, LLC (you) under Section 113(a)(1) and (3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(1) and (3). We find that you are violating Title V of the CAA, 42 U.S.C. § 7661, et seq., the Indiana State Implementation Plan and your Federally Enforceable State Operating Permit (FESOP) at your Indianapolis, Indiana facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference

The EPA contact in this matter is Dakota Prentice. You may call him at (312) 886-6761 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Director

Air and Radiation Division

Enclosure

cc: Phil Perry, Indiana Department of Environmental Management

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:)
Heritage-Crystal Clean, LLC) NOTICE OF VIOLATION and
Indianapolis, Indiana) FINDING OF VIOLATION
Proceedings Pursuant to) EPA-5-17-IN-06
Section 113(a)(1) and (3))
of the Clean Air Act,)
42 U.S.C. § 7413(a)(1) and (3))

NOTICE OF VIOLATION AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation and Finding of Violation (NOV/FOV) under Section 113(a)(1) and (3) of the Clean Air Act, 42 U.S.C. § 7413(a)(1) and (3). EPA finds that Heritage-Crystal Clean, LLC (HCC) is violating Title V of the Clean Air Act, 42 U.S.C. § 7661 et seq., the Indiana State Implementation Plan (SIP), and the Federally Enforceable Operating Permit at its Indianapolis, Indiana facility, as follows:

Relevant Statutory and Regulatory Background

Federally Enforceable State Operating Permit Program

1. On August 18, 1995, EPA approved the Indiana Federally Enforceable State Operating Permit (FESOP) program as part of the federally enforceable SIP for the State of Indiana. 60 Fed. Reg. 43008. Indiana's FESOP program became effective on October 17, 1995. Indiana's FESOP program rules are codified in 326 Indiana Administrative Code (IAC) 2-8.

FESOP Requirements

- 2. On June 24, 2010, the Indiana Department of Environmental Management (IDEM) issued FESOP No. F097-28484-00670 (2010 FESOP) to HCC with an effective date of June 24, 2010.
- 3. On January 25, 2012, IDEM issued First Administrative Amendment No. F097-31350-00670 (2012 FESOP).
- 4. Condition D.1.2(d) of the 2012 FESOP states, "The SO2 emissions from Heater H-400 shall not exceed 7.00 pounds per hour."
- 5. Condition D.1.2(e) of the 2012 FESOP states, "The SO2 emissions from Heater H-401 shall not exceed 11.97 pounds per hour."

- 6. Condition D.1.2(i) of the 2012 FESOP states, "The NOx emissions from Heater H-401 shall not exceed 12.62 pounds per hour."
- 7. On February 11, 2013, IDEM issued First Significant Permit Revision No. F097-31757-00670 (2013 FESOP) to HCC with an effective date of February 11, 2013.
- 8. Condition D.1.2(a) of the 2013 FESOP states, "Source-wide SO2 emissions shall not exceed 99.67 tons per twelve (12) consecutive month period, with compliance determined at the end of each month."
- 9. Condition D.1.7 of the 2013 FESOP provides the method for complying with the emission limit established in Condition D.2(a).
- 10. Condition D.1.2(e) of the 2013 FESOP provides the following hourly emission limits:

Emission Unit ID	SO ₂ Limit (lbs/hr)	NOx Limit (lbs/hr)	CO Limit (lbs/hr)
Vacuum Heater H-400 (Off-Gas)	11.5	0.75	1.65
Back-up Dehydration Heater H-401	13.00	10.00	10.00

- 11. On April 16, 2015, IDEM issued FESOP Renewal No. F097-34936-00670 (2015 FESOP) to HCC with an effective date of April 16, 2015.
- 12. Condition D.1.3 of the 2015 FESOP provides that the combined SO₂ emission limit from HT Heater 1 (H-500), HT Heater 2 (H-501), Vacuum Heater H-400 (Off-Gas), Dehydration Heater H-402, Back-up Dehydration Heater H-401, and Fire Water Pumps, shall not exceed 98.98 tons per year.
- 13. Condition D.1.8 of the 2015 FESOP provides the method for complying with the emission limit established in Condition D.1.3.
- 14. Condition C.3(a) of the 2015 FESOP states, "Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period"
- 15. On January 27, 2016, IDEM issued Significant Permit Revision No. F097-36380-00670 (2016 FESOP) to HCC with an effective date of January 27, 2016.
- 16. Condition D.1.3 of the 2016 FESOP provides the combined SO₂ emission limit from HT Heater 1 (H-500), HT Heater 2 (H-501), Vacuum Heater H-400 (Off-Gas), Dehydration Heater H-402, Back-up Dehydration Heater H-401, and Fire Water Pumps, Enclosed Ground Flare (FL-910), Boiler SB-200, and Boiler SB-201 shall not exceed 98.98 tons per year.

17. Condition D.1.8 of the 2016 FESOP provides the method for complying with the emission limit established in Condition D.1.3.

Indiana State Implementation Plan

- 18. On June 13, 2007, EPA approved 326 IAC 8-1-6 as part of the federally enforceable SIP for Indiana. 72 Fed. Reg. 32531.
- 19. 326 IAC 8-1-6 states, "New facilities (as of January 1, 1980) that: (1) have potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or more per year; (2) are located anywhere in the state; and (3) are not otherwise regulated by: (A) other provisions of this article; (B) 326 IAC 20-48; or (C) 326 IAC 20-56; shall reduce VOC [volatile organic compounds] emissions using best available control technology (BACT)."
- 20. On December 7, 1981, EPA approved 325 IAC 1.1-1-27 (recodified to 326 IAC 1-2-27) as part of the federally enforceable SIP for Indiana. 46 Fed. Reg. 54943.
- 21. 326 IAC 1-2-27 defines "Facility" as "any one (1) structure, piece of equipment, installation or operation which emits or has the potential to emit any air contaminant. Single pieces of equipment or installations with multiple emission points shall be considered a facility for the purpose of this rule."
- 22. On December 7, 1981, EPA approved 325 IAC 1.1-1-58 (recodified to 326 IAC 1-2-55) as part of the federally enforceable SIP for Indiana. 46 Fed. Reg. 54943.
- 23. 326 IAC 1-2-55 defines "potential emissions" as "Emissions of any one (1) pollutant which would be emitted from a facility if that facility were operated without the use of pollution control equipment unless such control equipment is (aside from air pollution control requirements) necessary for the facility to produce its normal product or is integral to the normal operation of the facility. Potential emissions shall be based on maximum annual rated capacity unless hours of operation are limited by enforceable permit conditions. Potential emissions from a facility shall take into account the hours of operation per year and shall be calculated according to federal emission guidelines in AP 42-most recent edition-Compilation of Air Pollution Factors, or calculated based on stack test data or other equivalent data acceptable to the commissioner."
- 24. On August 18, 1995, EPA approved 326 IAC 2-8-1 and 2-8-3 as part of the federally enforceable SIP for Indiana. 60 Fed. Reg. 43008.
- 25. 326 IAC 2-8-3(c)(I) provides that insignificant activities shall be listed on an application for a FESOP.
- 26. 326 IAC 2-8-1 states that, among others, the definitions provided in 326 IAC 2-7 apply throughout 326 IAC 2-8.
- 27. 326 IAC 2-7-1(20) defines "Insignificant activity" as "a facility or activity whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1-1."

- 28. On July 21, 1997, EPA approved 326 IAC 2-1-1 (recodified to 326 IAC 2-1-01) as part of the federally enforceable SIP for Indiana. 62 Fed. Reg. 38919.
- 29. 326 IAC 2-1-01(b)(2)(A)(ii)(DD) provides VOC exemption levels of three pounds per hour or 15 pounds per day.
- 30. On June 17, 2014, EPA approved 326 IAC 6.5-1-1 and 326 IAC 6.5-1-2 as part of the federally enforceable SIP for Indiana, with an effective date of July 17, 2012. 79 Fed. Reg. 34435.
- 31. 326 IAC 6.5-1-1(a) provides that, except as provided in subsections (b) through (d), sources or facilities located in Marion County shall comply with the limitations in 326 IAC 6.5-1-2 if the source or facility is not specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10, but has actual emissions of ten (10) tons per year or more of particulate matter (PM).
- 32. 326 IAC 6.5-1-2 provides, in relevant part, "Particulate matter emissions . . . shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf))[gr/dscf]."

Federal Title V Requirements

- 33. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that it is unlawful for any person to, among other things, operate a major source subject to Title V except in compliance with a Title V permit after the effective date of any permit program approved or promulgated under Title V of the Act.
- Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations establishing the minimum elements of a Title V permit program to be administered by any air pollution control agency. See 57 Fed. Reg. 32,295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.
- 35. Section 502(d) of the CAA, 42 U.S.C. § 7661a(d), provides that each state must submit to EPA a permit program meeting the requirements of Title V.
- 36. On December 4, 2001, EPA granted full approval to Indiana's Title V operating permit program, set forth at 326 IAC 2-7. See 66 Fed. Reg. 62,969.
- 37. 40 C.F.R. § 70.7(b) provides that no Title V source may operate after the time that it is required to submit a timely and complete application except in compliance with a Title V permit issued under an approved permit program. See 326 IAC 2-7-3.
- 38. 40 C.F.R § 70.2 defines "major source," in part, as any stationary source that directly emits or has the potential to emit greater than 100 tons per year (TPY) of any regulated air pollutant. See 326 IAC 2-7-1(21)(B).

- 39. 40 C.F.R. § 70.2 defines "regulated air pollutant" to include, among other things, VOCs and any pollutant for which a national ambient air quality standard (NAAQS) has been promulgated. *See* 326 IAC 2-7-1(30)(B).
- 40. EPA most recently promulgated a NAAQS for SO2 on April 3, 2012. 77 Fed. Reg. 20218.
- 41. Section 503 of the CAA, 42 U.S.C. § 7661b, 40 C.F.R. § 70.5(a) and 326 IAC 2-7-4(a) set forth the requirement to submit a timely, accurate, and complete permit application for a Title V permit, including information required to be submitted with the application.
- 42. 40 C.F.R. § 70.5(c)(3) provides that Title V permit applications shall include, among other things, all emissions of pollutants for which the source is a major, and all emissions of regulated air pollutants. See 326 IAC 2-7-4(c)(3)(A).
- 43. 40 C.F.R. § 70.3(d) states, "Fugitive emissions from a Part 70 source shall be included in a Part 70 permit application and a Part 70 permit in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source." See 326 IAC 2-7-2(e).

Relevant Factual Background

- 44. HCC owns and operates a used oil and used solvent recycling and distribution facility at 3970 West 10th Street, Indianapolis, Indiana in Marion County.
- 45. EPA issued CAA Section 114 Information Requests to HCC on: February 3, 2016; March 17, 2016; and November 28, 2016.
- 46. In response to EPA's February 8, 2016, Information Request, HCC provided monthly hours of operation for the following emission units: Boiler SB-200, Boiler SB-201, HT Heater 1 (H-500), HT Heater 2 (H-501), HT Heater 3 (H-502), Vacuum Heater H-400 (when combusting natural gas), Vacuum Heater H-400 (when combusting off-gas), Dehydration Heater H-402, Back-up Dehydration Heater H-401, and Fire Water Pumps.
- 47. Based on the hours of operation data provided by HCC and the compliance method described in Condition D.1.7 of the 2013 FESOP and Condition D.1.8 of the 2015 FESOP and 2016 FESOP, EPA calculated the monthly and 12-month consecutive SO₂ emissions generated by the facility. These calculations indicate that HCC's actual SO₂ emissions exceeded 100 tons per year continuously from the 12-month period of July 2013 to June 2014 through the 12-month period of April 2015 to March 2016.
- 48. HCC directly emitted or had the potential to emit more than 100 tons per year of SO₂ in 2014 and 2015, and thus was a major source of SO₂, as defined at 40 C.F.R § 70.2. See 326 IAC 2-7-1(21)(B).
- 49. HCC has not obtained a Part 70 (Title V) permit.

- 50. HCC has not incorporated VOC emissions from equipment leaks in its VOC potential to emit calculations.
- 51. In response to EPA's November 28, 2016 Information Request, HCC provided component counts for potential equipment leak sources for HCC's Lube Oil Process (P-400) and Lube Oil Hydrotreater Process (P-500).
- 52. Based on the component counts provided by HCC, EPA calculated the potential emissions of VOC from potential equipment leak sources for HCC's Lube Oil Process (P-400) and Lube Oil Hydrotreater Process (P-500) using EPA's Protocol for Equipment Leaks Emission Estimates, EPA-453/R-95-017, November 1995.
- 53. HCC's Lube Oil Process (P-400) is a facility constructed after January 1, 1980.
- 54. The Lube Oil Process (P-400) has the potential to emit more than 25 tons of VOCs per year.
- 55. The Lube Oil Process (P-400) is not subject to any other provisions of 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56.
- 56. The Lube Oil Process (P-400) is subject the requirements of 326 IAC 8-1-6.
- 57. HCC has not implemented a leak detection and repair (LDAR) program for VOC equipment leaks for the Lube Oil Process (P-400).
- 58. The HCC's Lube Oil Hydrotreater Process (P-500) is a facility constructed after January 1, 1980.
- 59. The Lube Oil Hydrotreater Process (P-500) has the potential to emit more than 25 tons of VOCs per year.
- 60. The Lube Oil Hydrotreater Process (P-500) is not subject to any other provisions of 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56.
- 61. The Lube Oil Hydrotreater Process (P-500) is subject the requirements of 326 IAC 8-1-6.
- 62. HCC has not implemented an LDAR program for VOC equipment leaks for the Lube Oil Hydrotreater Process (P-500).
- 63. On July 15, 2016, HCC submitted an "Application for Transition to Title V Operating Permit" to IDEM to obtain a Part 70 operating permit (Title V Permit Application).
- 64. The Title V Permit Application did not include fugitive emissions from equipment leaks.
- 65. The operation of the reactors associated with the Lube Oil Hydrotreater Process, R-500A/B and R-501A/B, require regular purging to prevent the buildup of certain VOCs.

- 66. The Title V Permit Application provides emission data associated with purge events at R-500A/B and R-501A/B.
- 67. The purge gases from R-500A/B and R-501A/B exceed the insignificant activity limit for VOCs.
- 68. Purge gas emissions from R-500A/B and R-501A/B were not listed in FESOP application(s) submitted by HCC.
- 69. The operation of column T-400 requires regular steamout/cleaning to ensure proper operation.
- 70. The Title V Permit Application provides emission data associated with steamout/cleaning events at T-400.
- 71. The gases generated from steamout/cleaning of T-400 exceed the insignificant activity limit for VOCs.
- 72. Purge gas emissions from T-400 were not listed in FESOP application(s) submitted by HCC.
- 73. HCC uses dehydration off-gas generated at the dehydration drum (V-400) as a fuel for the back-up dehydration heater (H-401) and dehydration heater (H-402).
- 74. In response to EPA's March 17, 2016, Information Request, HCC provided estimated emissions of PM from H-401 and H-402 based on testing of material flowing into and out of V-400.
- 75. The annual PM emissions estimate provided by HCC exceeded 10 tons per year for both H-401 and H-402.
- 76. On April 6, 2016, HCC conducted a performance test at H-402 for PM (2016 Performance Test).
- 77. The 2016 Performance Test identified an average hourly PM emission rate of 3.23 pounds per hour and an annual PM emission rate of 14.14 tons per year.
- 78. Based on the information provided by HCC, H-401 and H-402 are subject to 326 IAC 6.5-1-1.
- 79. Based on the estimated PM emissions data provided by HCC, H-401 and H-402 exceed the emission limit established pursuant to 326 IAC 6.5-1-2.
- 80. On June 28, 2016, HCC submitted a "FESOP Annual Compliance Certification, 2015", which documented, amongst other things, "a possible deviation" from the 40% opacity limit at H-401 on September 22, 2015.

- 81. In response to EPA's February 8, 2016, Information Request, HCC provided the results of engineering tests, which identified hourly emission rates at H-400 and H-401.
- 82. The data provided by HCC indicated that the hourly SO₂, NO_x, and CO emission limits were exceeded at H-400.
- 83. The data provided by HCC indicated that the hourly SO₂, NO_x, and CO emission limits were exceeded at H-401.

Violations

- 84. HCC failed to limit SO₂ emissions below 99.67 tons per year, in violation of Condition D.1.2(a) of the 2013 FESOP.
- 85. HCC failed to limit SO₂ emissions below 98.98 tons per year, in violation of Condition D.1.3 of the 2015 FESOP.
- 86. HCC failed to limit SO₂ emissions below 98.98 tons per year, in violation of Condition D.1.3 of the 2016 FESOP.
- 87. HCC failed to reduce VOC emissions from the Lube Oil Process (P-400) using BACT, in violation of 326 IAC 8-1-6.
- 88. HCC failed to reduce VOC emissions from the Lube Oil Hydrotreater Process (P-500) using BACT, in violation of 326 IAC 8-1-6.
- 89. HCC exceeded the insignificant emission threshold for VOCs and failed to list emissions from R-500A/B and R-501A/B on its FESOP applications, in violation of 326 IAC 2-8-3(c)(3)(I).
- 90. HCC exceeded the insignificant emission threshold for VOCs and failed to list emissions from T-400 on its FESOP applications, in violation of 326 IAC 2-8-3(c)(3)(I).
- 91. HCC has emitted PM from H-401 at concentrations exceeding 0.03 gr/dscf, in violation of 326 IAC 6.5-1-2.
- 92. HCC has emitted PM from H-402 at concentrations exceeding 0.03 gr/dscf in violation of 326 IAC 6.5-1-2.
- 93. HCC exceeded the opacity limit of 40% at H-401, in violation of Condition C.3(a) of the 2013 FESOP.
- 94. HCC exceeded the hourly emission limits for SO₂, NOx, and CO at H-400 in violation of Condition D.1.2(d) of the 2012 FESOP and Condition D.1.2(e) of the 2013 FESOP.
- 95. HCC exceeded the hourly emission limits for SO₂, NO_x, and CO at H-401 in violation of Conditions D.1.2(e) and D.1.2(i) of the 2012 FESOP and Condition D.1.2(e) of the 2013 FESOP.

- 96. HCC failed to submit a timely and complete Title V permit application to IDEM in violation of Section 503 of the CAA, 42 U.S.C. § 7661b and 40 C.F.R. § 70.5(a). See 326 IAC 2-7-4(a).
- 97. HCC operated a major source of SO₂ without a Title V permit issued by IDEM in violation Section 502(a) of the CAA, 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.7(b). See 326 IAC 2-7-3.
- 98. HCC failed to include fugitive emissions from equipment leaks in its Title V Permit Application, in violation of Section 503 of the CAA, 42 U.S.C. § 7661b and 40 C.F.R. § 70.5(a) and (c). See 40 C.F.R. § 70.3(d), 326 IAC 2-7-2(e), and 326 IAC 2-7-4(a).

Environmental Impact of Violations

99. These violations have caused or can cause excess emissions of VOCs, PM, CO, NOx, and SO₂, which are associated with the following:

Ozone: Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

<u>Particulate Matter</u>: Particulate matter, especially fine particulates, contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:

- irritation of the airways, coughing, and difficulty breathing;
- decreased lung function;
- aggravated asthma;
- chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

<u>Carbon Monoxide</u>: CO can cause harmful health effects by reducing oxygen delivery to the body's tissues, including the heart and brain. At extremely high levels, CO can cause death.

Nitrogen Oxides: Current scientific evidence links short-term NOx exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. In addition, studies show a connection between breathing elevated short-term NOx concentrations, and increased hospital admissions for respiratory issues, especially asthma.

<u>Sulfur Dioxide</u>: Current scientific evidence links short-term exposures to SO₂, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects including bronchoconstriction and increased asthma symptoms.

2/3//17 Deta

Edward Nam

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I certify that I sent a Notice of Violation, No. EPA-5-17-IN-06, by Certified Mail, Return Receipt Requested, to:

Robert Chalhoub Heritage-Crystal Clean LLC 3970 West 10th Street Indianapolis, Indiana 46222

I also certify that I sent copies of the Notice of Violation by E-mail to:

Phil Perry, Chief, Air Compliance Branch PPERRY@idem.IN.gov

On the 3 day of 12017.

Kathy Jones

Program Technician

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 1893